CLAIMS

- 1. A method of allowing entities to cooperate for implementing one or more processes, the method comprising:
- (a) storing and retrieving information in the form of tuples;
- (b) using the tuples to represent objects involved in one or more processes, wherein each object is produced by an entity; and
- (c) connecting the tuples to represent sequential events of the one or more processes.
- 2. The method of claim 1 further comprising:
- (d) associating each object with one or more semantic terms; and
- (e) allocating one tuple named with the semantic term for every association, the tuple containing the information provided by the object corresponding to the meaning of the semantic term.
- 3. The method of claim 2 further comprising:
- (f) indicating one or more of the semantic terms in order to represent a goal of the one or more processes.
- 4. The method of claim 2 further comprising:
- (f) generating chains of events which terminate at the tuples corresponding to each semantic term.
- 5. The method of claim 2 further comprising:
- (f) generating semantic categories by aggregating the semantic terms.
- 6. The method of claim 1 further comprising:
- (d) representing the conditions under which the entity can produce one or more of the objects by using tuple templates.

- 7. An apparatus for allowing entities to cooperate for implementing one or more processes, the apparatus comprising:
- (a) means for storing and retrieving information in the form of tuples;
- (b) means for represent objects involved in one or more processes by using the tuples, wherein each object is produced by an entity; and
- (c) means for connecting the tuples to represent sequential events of the one or more processes.
- 8. The apparatus of claim 7 further comprising:
- (d) means for associating each object with one or more semantic terms; and
- (e) means for allocating one tuple named with the semantic term for every association, the tuple containing the information provided by the object corresponding to the meaning of the semantic term.
- 9. The apparatus of claim 8 further comprising:
- (f) means for indicating one or more of the semantic terms in order to represent a goal of the one or more processes.
- 10. The apparatus of claim 8 further comprising:
- (f) means for generating chains of events which terminate at the tuples corresponding to each semantic term.
- 11. The apparatus of claim 8 further comprising:
- (f) means for generating semantic categories by aggregating the semantic terms.
- 12. The apparatus of claim 7 further comprising:
- (d) means for representing the conditions under which the entity can produce one or more of the objects by using tuple templates.

- 13. An article of manufacture for allowing entities to cooperate for implementing one or more processes, the article of manufacture comprising a computer-readable medium holding computer-executable instructions for performing a method comprising:
- (a) storing and retrieving information in the form of tuples;

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- (b) using the tuples to represent objects involved in one or more processes, wherein each object is produced by an entity; and
- (c) connecting the tuples to represent sequential events of the one or more processes.
- 14. The article of manufacture of claim 13 wherein the computer-executable instructions perform a method further comprising:
- (d) associating each object with one or more semantic terms; and
- (e) allocating one tuple named with the semantic term for every association, the tuple containing the information provided by the object corresponding to the meaning of the semantic term.
- 15. The article of manufacture of claim 14 wherein the computer-executable instructions perform a method further comprising:
- (f) indicating one or more of the semantic terms in order to represent a goal of the one or more processes.
- 16. The article of manufacture of claim 14 wherein the computer-executable instructions perform a method further comprising:
- (f) generating chains of events which terminate at the tuples corresponding to each semantic term.
- 17. The article of manufacture of claim 14 wherein the computer-executable instructions perform a method further comprising:
- (f) generating semantic categories by aggregating the semantic terms.
- 18. The method of claim 13 wherein the computer-executable instructions perform a method further comprising:
- (d) representing the conditions under which the entity can produce one or more of the objects by using tuple templates.